



OUT21/7466

James Mcdonough
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NSW Department of Planning, Industry and Environment

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Dear Mr Mcdonough

**Martins Creek Quarry Project (SSD-6612)
Response to Submissions (RTS)**

I refer to your email of 3 June 2021 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The proposal involves the extraction of 1.5 million tonnes of material per annum, comprising of andesite hard rock, expansion into new extraction areas and the consolidation of existing operations and approvals.

Our main concern is that there is inconsistency between the proponent's and the Department's application of the exemptions from water licence requirements for water captured from minor streams at the site, along with other water prediction errors. We therefore have a number of recommendations to ensure impacts and water entitlements are adequately addressed.

Our detailed advice can be found in **Attachment A**.

Any further referrals to DPIE Water and NRAR can be sent by email to landuse.enquiries@dpi.nsw.gov.au, or to the following coordinating officer within DPIE Water:

Alistair Drew – Project Officer
E: alistair.drew@dpi.nsw.gov.au

Yours sincerely

A handwritten signature in blue ink that reads 'Liz Rogers'.

Liz Rogers
Manager, Assessments, Knowledge Division
Department of Planning, Industry and Environment: Water
3 August 2021

Attachment A

Detailed advice to DPIE Planning & Assessment regarding the Martins Creek Quarry Project (SSD-6612) RTS

1.0 Water Take and Entitlement

1.1 Explanation

- There is inconsistency between the proponent's and the Department's application of the exemptions from water licence requirements for water captured from minor streams at the site. The current and proposed surface water management system captures runoff from undisturbed catchments and is proposing this to be exempt from water licensing. The relevant exemption however based on Schedule 1(3) of the *Water Management (General) Regulation 2018* is applicable to water captured in dams that are used solely for the purpose as defined. In this case however as a component of the water captured is runoff from undisturbed areas, the Department's view is that the exemption is not applicable. The surface water management system needs to be reviewed to be consistent with Harvestable Rights dams, dams that meet relevant licence exemptions and to confirm any licence requirements and the ability to acquire such licenses.
- The preferred groundwater modelling scenario used by the proponent has predicted groundwater take to reach a maximum of 30.6ML/yr from year 21 of the project. This water take is within the sites current licensed entitlement of 33ML. It is noted however that one of the scenarios modelled (wet year/high gradient) predicted the water take to be 40ML/yr in Year 21 and 48ML/yr by Year 25. The proponent would need to ensure sufficient entitlement is held prior to such an event occurring.
- The calculations of surface water entitlement for the project have relied on subtracting the water returned to the downstream environment during discharge events after the water has been captured. The Department advises there is currently no ability to consider return flows to reduce license requirements and therefore this needs to be reviewed to determine the water entitlement for the project.
- Based on the comments regarding the surface water management system it is expected the water balance for the site will need to be reviewed with the need to confirm water availability and security for the project and the filling and functioning of the final void.
- The proponent proposes to update the Water Management Plan with revised sections on Site Water Balance, Groundwater Monitoring and Management and Surface Water Monitoring and Management. This is supported. Triggers and response protocols will need to be included to manage the site to within approved impacts and to within any water entitlements held at the site.
- The Site Water Balance will be critical in informing water take predictions and ongoing reviews will inform any model updates and potential changes to licence requirements. This will need to include accurate metering of water captured, pumped and used, combined with modelled inputs and outputs where required. The groundwater level monitoring program will also assist in flagging potential changes to groundwater inflows from that predicted, which may require a review of impact and take predictions

1.2 Recommendations – Prior to Determination

- Review the surface water management system to separate runoff from undisturbed and disturbed catchments. This needs to be maximised to achieve best practice and to minimise the requirement to hold water licences. The use of clean water dams that are sized within the Maximum Harvestable Rights Dam Capacity and clean water diversions where appropriate is recommended.

- Review the surface water management system to ensure dams on minor streams are either: 1) consistent with the Maximum Harvestable Rights Dam Capacity of the property, 2) satisfy the exclusion in Sch 1(3) of the WM Reg 2018 which requires the dam to be used solely for the purpose of the exclusion, or 3) considered for water licensing.
- Review the surface water entitlements for the project on minor streams based on the review of the surface water management system. This needs to recognise there is no ability to reduce water license requirements based on return water via operational discharges subsequent to the initial water capture.
- Review the water balance based on any changes to the water management system to: 1) confirm water availability for the project in the range of wet, dry and median years, 2) assess potential changes to downstream flows and any impacts to the environment and water users, and 3) assess any changes to the final void water level recovery

2.0 Bore Impact Assessment

2.1 Explanation

The Groundwater Impact Assessment (GIA) reports two active registered bores were identified within five kilometres of Martins Creek Quarry (MCQ). Both of the registered bores are located outside of the mapped extent of the Martins Creek Ignimbrite Member. Neither of the two active bores are directly down gradient of MCQ, and no impacts on these bores is predicted due to the MCQ expansion.

However, a check of the Department's records has identified an additional registered user not reported in the GIA. This bore is the closest registered work at approximately 800m to the north, potentially in the same geology. An assessment of impacts on this bore is required.

2.2 Recommendation – Post Determination

- Undertake an impact assessment of bore 20BL171512 according to the requirements of the Aquifer Interference Policy; include the bore in a monitoring plan under the Water Management Plan; and commit to “make good” if supply is affected beyond minimal thresholds.

3.0 Post Approval Recommendations

- The ability to accurately meter and monitor water take from surface and groundwater sources will need to be developed with ongoing review of actual versus modelled predictions. This will be a key component to confirm impact predictions, the adequacy of mitigating measures and compliance for water take.
- The Water Management Plan should be updated to reflect monitoring, metering and management measures to report on groundwater and surface water take and potential impacts to water sources due to the activity.
- The proponent must report on water take at the site each year (direct and indirect) in the Annual Review. This is to include water take where a water licence is required and where an exemption applies. Where a water licence is required the water take needs to be reviewed against existing water licences.
- The proponent must ensure sufficient water entitlement is held in a water access licence/s to account for the maximum predicted take for each water source prior to take occurring.
- The proponent must ensure that relevant nomination of work dealing applications for Water Access Licences proposed to account for water take by the project have been completed prior to the water take occurring.
- The proponent must comply with the rules of the relevant water sharing plans.